THE UNITED STATES PATENT AND TRADEMARK OFFICE

APR 2 4 2001

Artv. Ref.: 1179-46

Artv. Ref.: 1179-46

Patent Application of

ELY

Serial No. 09/776,908

Filed: February 6, 2001

For: POSITION SENSOR

Examiner:

April 20, 2001

Assistant Commissioner for Patents Washington, DC 20231

Sir:

INFORMATION DISCLOSURE STATEMENT

The Examiner's attention is drawn to the attached Form PTO-1449 and a copy of references cited therein from possibly related cases:

- Ely et al, Serial No. 09/111,885, filed July 8, 1998, POSITION (1) DETECTOR; (division of Serial No. 09/627,423 filed July 27, 2000);
- Ely et al, Serial NO. 09/220,354, filed December 24, 1998, SIGNAL (2)PROCESSING APPARATUS AND METHOD;
- Dames et al, Serial No. 09/424,706, filed November 29, 1999, (3)TRANSDUCED AND METHOD OF MANUFACTURE
- Ely et al, Serial No. 09/700,418, filed November 15, 2000, POSITION (4) SENSOR;
- England et al, Serial No. 09/509,651, filed June 8, 2000, MOTOR (5) CONTROL SYSTEM;

- (6) Ely et al, Serial No. 09/529,387, filed June 8, 2000, POSITION (7) Ely et al, Serial No. 09/627,423, filed July 27, 2000, POSITION (A) POSITION (1) POSITION (2) POSITION (2) POSITION (3) POSITION (4) POSITION (5) POSITION (6) POSITION
- Ely et al, Serial No. 09/754,218, filed January 5, 2001, POSITION (8) SENSOR;

Consideration and return of a fully initialed PTO-1449 is requested. An Information Disclosure Statement fee for this stage of prosecution, if necessary, is attached.

Respectfully submitted,

NIXON & VANDERHYE P.C.

LSN:vc

1100 North Glebe Road, 8th Floor

Arlington, VA 22201-4714

Telephone: (703) 816-4000 Facsimile: (703) 816-4100

ı			_					
Sheet	2 ['] of	6						
INFO	RMATION DISC	LOSURE	ATTY.	DOCKET NO.	SERIAL NO.			
CITATION			1179	9-46 OIP	09/776,908			
				CANT	03/110,300			
				/ (S)				
(L	Jse several sheets if nece	essarv)	ELY FILING	APR 2 0 2001 S	GROUP			
,-		,,		3 3	GROUP			
				J.S. PATENT DOCUMENTS				
*EXAMINER INITIAL	DOCUMENT	NII IMBED	DATE	NAME	CLASS	SUBCLASS		DATE
IINITIAL	51296		7/92	Bogner	JEAGG	GOBOLAGO	<u> </u>	<u> </u>
	51883		2/93	Ryan				
	53810		1/95	Kobayashi et al				
	54343		7/95	Lin				
	21457		1/39	Wechsung				
	29422	12	6/60	Mynall				
	32199	56	11/65	Newell et al			-	
	32979	40	1/67	Mulligan et al				
	36479	63	3/72	Bailey				
	38512	42	11/74	Ellis				
	38986	35	8/75	Kulterman		, _		
	39064	36	9/75	Kurauchi et al				
	39626	63	6/76	Visser				
	40053	96	1/77	Fujiwara et al				
	40816	03	3/78	Davis et al				
	40928	52	6/78	Fowler et al				
	41561		5/79	Schedrovitsky et al				
	42107	75	7/80	Rodgers et al				
	43413	85	7/82	Doyle et al				
			FC	DREIGN PATENT DOCUMENTS				
	DOCUM	ENT	DATE	COUNTRY	CLASS	SUBCLASS	TRANS YES	LATION NO
	214123		12/84	Great Britain		· ·		
····	065791		6/95	Furone				

0675581 A1 10/95 Europe 0709648 A2 5/96 Europe 1452132 10/76 **Great Britain** 12/81 Great Britain 1604824

OTHER DOCUMENTS (including Author, Title, Date, Pertinent pages, etc.)

ELECTRONICS LETTERS, Vol. 11, No. 1, 9 January 1975, pages 5-6, Gordon, "Digital xy Position Indicator Using Walsh Functions Pulle et al, "A New Magnetoresistive Based Sensor for Switched Reluctance Drives" PROCEEDINGS OF THE ANNUAL POWER ELECTRONICS SPECIALISTS CONFERENCE (PECS), Toledo, June 29 - July 3, 1992, Vol. 2, No. CONF, 23, 29 June 1992, pages 839-843, INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

*Examiner **Date Considered** Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include

copy of this form with next communication to application.

INFORMATION DISCLOSURE CITATION			ATTY. DOCKET NO. 1179-46 APPLICANT ELY FILING DATE 6 February 2001 U.S. PATENT DOCUMENTS SERIAL NO. 09/776,908 APR 2 0 2001 GROUP GROU						
			APPLIC	ANT	D ADD 2 0 2004	2	APP	CIVA	``
			ELY		APR 2 0 2001	у	Chnoline ?	1	<u> </u>
,,	USB SB	veral sheets if necessary)	FILING	DATE	E OFF	GROUP	Cen Cen	, 001	
				oruary 2001	ADEMABIS		- 7	⁶ / ₂₆₀₀	
EXAMINER				J.S. PATENT I	DOCUMENTS	· · · · · · · · · · · · · · · · · · ·		FILING	DATE
INITIAL	' 	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS		
	4-4	4423286	12/83		Bergeron		<u> </u>	ļ	
	++	4482784	11/84	·	Whetstone				_
	++	4504832	3/85		Conte				
	₩	4507638	3/85		Brosh Rockwell				
	┼┼	4532376 4609776	7/85 9/86	Λ.	furakami et al			-	
	┼╌┼	4697244	9/87		furakami et al			 	
	+	4709209	11/87		furakami et al				
	+	4711977	12/87		Miyamori et al				
	+	4723446	2/88	-	Saito et al				
	\Box	4734546	3/88	<i></i>	Landmeier		,		-
	T	4737698	4/88		McMullin et al			-	
		4786765	11/88	Υ	amanami et al				
		4848496	7/89	N	lurakami et al				
		B1 4878553	9/97	Y	amanami et al				
		4878553	11/89	Y	amanami et al				
		4893077	1/90		Auchterlonie				
		4902858	2/90	Y	amanami et al				
		4985691	1/91		Pulyer et al		<u></u>	<u> </u>	
			FC	REIGN PATE	NT DOCUMENTS			TDANO	ATION
		DOCUMENT	DATE		COUNTRY	CLASS	SUBCLASS		LATION NO
		2012431 A	7/79	U	nited Kingdom				
		2021273 A	11/79		Great Britain				
		2059593 A	4/81		Great Britain				
		2064125 A	6/81		Great Britain				
		2074736 A	11/81		Great Britain		<u> </u>		
	\sqcup	2103943 A	3/83		Great Britain				
		1325017	3/62		France		<u> </u>		L
	11	OTHER DOC	UMENTS (including Aut	thor, Title, Date, Pe	ertinent pages,	etc.)		
	++			··	·				
	+								
<u>.</u>	+-								
								-	
	1			-		•			

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

Date Considered

*Examiner

INFORMATION DISCLOSURE CITATION		ATTY. DOCKE	ET NO.	SERIAL NO.	REC APR 2 Chnology Cent		
		1179-46 APPLICANT	APR Z 0 2001 -	09/776,908	400	Str	-
			APR 2 0 2001	Te	""" 2	, "	0
(Use	several sheets if necessary)	ELY FILING DATE	- K	GROUP	100/001 ×	2001	
		DEMARK		<u></u>	Sy Cen	' 0.	
		6 Februar	<u> </u>			<u> 2600</u>	, ——
AMINER		U.S. P	ATENT DOCUMENTS			FILING	3 DATE
IITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS		
	4999461	3/91	Murakami et al				
	5013047	5/91	Schwab				
	5028745	7/91	Yamanami et al			i	
	5041785	8/91	Bogaerts et al				•
	4891590	1/90	Hammel et al				
	3772587	11/97	Ferrand et al				
	3812481	5/74	Stednitz				
	6124708	9/00	Dames				
	4820961	4/89	McMullin				
	4014015	3/77	Gundlach				
	5406155	4/95	Persson				
	4868443	9/89	Rossi		•		
	5486731	1/96	Masaki et al				
	5187389	1/93	Schalk				
	5693993	12/97	Ito et al	-			
-	5783940	7/98	Kolomeitsev				
	2867783	1/59	Childs				-
	4223300	4/97	Wiklund				
	4425511	1/84	Borsh	··-			
	4420011		N PATENT DOCUMENTS				
					· · · · ·	TRANS	LATIO
	DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	YES	NC
	1134848	8/62	Germany				
	3500121 A1	7/86	Germany				<u> </u>
	3620412 A1	12/87	Germany				ļ
	0159191 A2	10/85	European				ļ
	0182085 A3	5/86	European				
	0182085 A2	5/86	European				
	0209513 A1	6/86	European				<u> </u>
	OTHER DOC	JMENTS (inclu	ding Author, Title, Date, Pe	rtinent pages,	etc.)		
				<u></u>			
		-					
aminer			Date Considered	· •			

Sheet	5	of	6								
INFORMATION DISCLOSURE			URE	ATTY.	DOCKET NO.	OIA	SERI	AL NO.	Pochnology (
CITATION			1179	-46	,	\ 09/7	776,908	17/	502		
				APPLIC	CANT	App 4		,	APP	~/V	% .
				ELY		H 70 2001	(69)		echno.	24	CD
((Use se	everal sheets if necessary)		FILING	DATE	£ .6	GRO	UP	-10/0gv	· * <00	7
				6 Eal	bruary 200 [.]	1 RADOLLOW OFFIX			2 (enter .	
					IS DATENT	APR 2 0 2001 S				~~~ <i>\\\\</i>	0
*EXAMINEF	٦ -				J.J. 1 ATENT						
INITIAL		DOCUMENT NUMB	ER	DATE		NAME		CLASS	SUBCLASS	IF APPRO	<u>OPRIATE</u>
	\bot	4963703		10/90		Phillips		 			
	$\perp \perp$	5748110		5/98		Sekizawa		 			
	\perp	4975546		12/90		Craig					
	\bot	5815091		10/90		Dames		 	ļ	ļ. <u></u>	· ·
	4-4							4			
	\perp	·······						ļ	 		
	\perp	·						<u> </u>	.	<u> </u>	
	\perp			_				<u> </u>			
	\perp							<u> </u>			
	\perp									ļ . 	
	4									-	
	\bot				-			 			
	Ш							<u> </u>	<u></u>	ļ	
	4-4				ļ			-	<u> </u>		
	4-4									<u> </u>	
	44						*	-			
	+							<u> </u>			
	Ш	*****			DEICH DAT	ENT DOCUMENTS				l	
				F(JREIGN PAT	ENT DOCUMENTS	<u> </u>			TRANS	LATION
		DOCUMENT		DATE		COUNTRY		CLASS	SUBCLASS	YES	NO
		0552001 A1		7/93		European		1	T		-
	+	0607694 A1		7/94		European	-	1			
	+	0680009 A2		11/95		European		† · · · · · ·			
	+	WO 92/12401		7/92		WIPO					
	+-	WO 94/25829		11/94	-	WIPO		1			
	+ 1	WO 96/03188 A		2/96		WIPO					
	 	851543	··	10/60		Great Britain	- 4. 9		1		
			DOCL		(including A	uthor, Title, Date,	Pertiner	nt pages.	etc.)	·	·
	T	OTTIETT	<u> </u>	JINE ITTO	(morading A	attron, Titlo, Bato,		n pagoo,	<u> </u>		
	\top			-							
	П	··-		=1							
	\prod										
										<u>-</u>	
		· · · · · ·						··			
_	Щ		······			1 5 . 5					
Examine	r					Date Conside	red				

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

Sheet	6	of 6							-
INFORMATION DISCLOSURE		ATTY. D	OCKET NO.		SERIAL NO.		_		
CITATION			1179-	-46	OIPE	09/776,908	Technology	En-	
				ANT	400 0 0 2000		Api	, CE	1/Vr.
			ELY		TO APR & II ZUUL		Tech.	21	-50
(Use se	everal sheets if necessary)	FILING I	DATE	1 Report of the state of the st	GROUP	"10/09 _V	`^	201
				ruary 200	1 & 3			Center.	2
+5744414155			U	.S. PATENT	DOCUMBENS				000
*EXAMINEF INITIAL	{ 	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	IF APPR	G DATE OPRIATE
	+							-	
	╁┈	,			1 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
	T	-							
	4-4				w				
	+							<u> </u>	
	+								
	+								
		1	FO	REIGN PAT	ENT DOCUMENTS				
									SLATION
		DOCUMENT	DATE		COUNTRY	CLASS	SUBCLASS	YES	NO
	\sqcup	1122763	8/68		Great Britain	·			
	\sqcup	2682760	4/93		France				<u> </u>
 		2298082 97/14935	8/76 4/97		France WIPO				
	+	0743508 A2	11/96		Europe		 		1
		WO 98/00921	1/98		PCT				
		0313046	4/89		Europe				
		0554900	8/93		Europe				
		- 10 mile							<u></u>
	1 1	OTHER DOC	UMENTS (i	ncluding A	uthor, Title, Date, Pe	rtinent pages,	etc.)		
	+					<u> </u>			
	+								
	\square								
	\sqcup	***							
	+								
*Examiner	.				Date Considered	<u> </u>			

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.